

# MONTANA FISH, WILDLIFE & PARKS

## HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

**Species:** Bobcat

**Region:** 1

**Hunting District:**

**Year:** 2013

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

Increase the existing Region One (R-1) bobcat quota from the current 250 to 275 animals for the 2013-14 season.

In 1986, the number of bobcats allowed per trapper increased from 1 to 2 and the regional quota increased from 135 to 150. In 1987, the season dates were extended from 12/1-1/31 to 12/1-2/15. The number of bobcats per trapper or hunter increased from 2 to 6 in 1991 and to 7 in 1994. The R-1 quota was raised from 150 to 200 in 2000, and further increased to 250 in 2005. In 2006, the limit for bobcats per person in R-1 was decreased from 7 to 4 in an effort to provide opportunity to more people, where it currently remains today.

- 2. Why is the proposed change necessary?**

The hunting and trapping of bobcats is extremely popular, especially given current fur prices. In 2012, 143 individuals harvested one or more bobcats in R-1 alone. Prices have been rising steadily in recent years and averaged \$596.32 at the western States Fur Auction in Columbus in March of this year, with a high of \$1,656 reported. Harvest data indicates an increase in bobcat harvest in R-1 is sustainable while safely protecting the resource.

- 3. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

The management objective for R-1 bobcats is to maintain healthy populations while allowing sustained harvest. Bobcats in R-1 are managed conservatively, as indicated by several population and harvest parameters. One primary example is the length of time until the quota is reached. R-1's bobcat quota of 250 consistently fills more quickly than any other Trapping District in Montana. Even though the season closes February 15, R-1's quota has been filled by the end of December each of the last 10 years. An increase in the quota in 2005 from 200 to 250 did little to increase the length of time necessary for the quota to fill (Table 1).

Table 1. Dates when bobcat season closed in R-1 and total bobcats taken, 1989-2012.

| YEAR | DATE CLOSED | TOTAL TAKEN | QUOTA |
|------|-------------|-------------|-------|
| 1989 | FEB. 15     | 124         | 150   |
| 1990 | FEB. 15     | 86          | 150   |
| 1991 | FEB. 15     | 185         | 150   |
| 1992 | FEB. 14     | 178         | 150   |
| 1993 | FEB. 15     | 168         | 150   |
| 1994 | JAN. 26     | 148         | 150   |
| 1995 | FEB. 10     | 169         | 150   |
| 1996 | FEB. 15     | 167         | 150   |

|      |         |     |     |
|------|---------|-----|-----|
| 1997 | JAN. 15 | 164 | 150 |
| 1998 | JAN. 30 | 174 | 150 |
| 1999 | JAN. 6  | 203 | 150 |
| 2000 | DEC. 29 | 222 | 200 |
| 2001 | DEC. 29 | 233 | 200 |
| 2002 | JAN. 2  | 201 | 200 |
| 2003 | DEC. 21 | 210 | 200 |
| 2004 | DEC. 20 | 214 | 200 |
| 2005 | DEC. 23 | 230 | 250 |
| 2006 | DEC. 21 | 244 | 250 |
| 2007 | DEC. 20 | 266 | 250 |
| 2008 | DEC. 28 | 260 | 250 |
| 2009 | DEC. 27 | 243 | 250 |
| 2010 | DEC. 23 | 278 | 250 |
| 2011 | DEC. 24 | 259 | 250 |
| 2012 | DEC. 22 | 280 | 250 |

Even though the bobcat quota in R-1 is quickly filled each year, a statewide analysis of bobcat survival by Jay Newell indicates bobcats in R-1 have the highest survival rate of all 7 regions. By utilizing a technique that involves backdating the ages of harvested bobcats, he estimated that for the 2002-2006 period, R-1 bobcats had an annual survival rate of 71.8%, as compared to an average of 63.6% for bobcats in the other 6 regions (Range: 55.9 to 68.7%).

The proportion of juveniles, yearlings, young adults and old adults were examined for the 1996-2010 period (Table 2). Even though there were a record low number of kittens harvested in 2008 and this is reflected in the low harvest of yearlings in 2009, it has not affected the rate at which the quota has filled since then, further evidence of a large and healthy population.

Table 2. Age classes of harvested bobcats in R-1, 1996-2010.

| Year                    | % Juveniles<br>(0.5 years old) | % Yearlings<br>(1.5 years old) | % Young Adults<br>(2.5-6.5 years old) | % Old Adults<br>(> 6.5 years old) |
|-------------------------|--------------------------------|--------------------------------|---------------------------------------|-----------------------------------|
| 1996                    | 36                             | 14                             | 38                                    | 12                                |
| 1997                    | 17                             | 17                             | 54                                    | 11                                |
| 1998                    | 33                             | 14                             | 43                                    | 10                                |
| 1999                    | 26                             | 21                             | 39                                    | 13                                |
| 2000                    | 28                             | 12                             | 53                                    | 7                                 |
| 2001                    | 37                             | 12                             | 39                                    | 12                                |
| 2002                    | 30                             | 14                             | 42                                    | 15                                |
| 2003                    | 35                             | 18                             | 38                                    | 9                                 |
| 2004                    | 19                             | 18                             | 49                                    | 9                                 |
| 2005                    | 27                             | 20                             | 39                                    | 7                                 |
| 2006                    | 33                             | 16                             | 36                                    | 9                                 |
| 2007                    | 19                             | 22                             | 48                                    | 7                                 |
| 2008                    | 8                              | 15                             | 62                                    | 8                                 |
| 2009                    | 23                             | 7                              | 52                                    | 15                                |
| 2010                    | 28                             | 15                             | 43                                    | 11                                |
| <b>15 Year Average:</b> | <b>27</b>                      | <b>16</b>                      | <b>45</b>                             | <b>11</b>                         |

Another parameter that is monitored is the proportion of females in the harvest. Generally, it is preferred that this figure is below 50%, given that this is the reproductive segment of the population. As seen below, the proportion of females harvested during the past 24 year period occasionally exceeded the 50%

threshold, especially in 1992 and 2000. However, these events did not appear to negatively affect the population in following years, indicating a resilient population.

Figure1. Proportion of all female bobcats harvested in R-1, 1989-2012.

4. **Provide information related to any weather/habitat factors that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature / precipitation information).**

Winter conditions for the past 24 years have been variable. Areas that received extensive forest management in the 1980's and 1990's have probably matured to the point that they are now providing ideal habitat for hares, a primary food for bobcats in R-1. As these stands mature further, hare numbers may decrease, but these effects are not likely to be evident for some time. Access throughout most of R-1 in the non-wilderness areas is relatively good for over the snow vehicles.

5. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

This proposal to increase the bobcat harvest was brought forth by the R-1 chapters of the Montana Trappers Association and Montana Fur Harvesters at our annual spring meeting. While most veteran trappers recognize the healthy bobcat populations throughout most of R-1, many also remember years past when it was difficult to fill a quota of 150. These individuals appreciate the value of a conservative harvest. An increase of 25 is viewed as a modest increase that will be closely monitored.

Submitted by: Tim Thier

Date: 05/15/13

Approved: \_\_\_\_\_  
Regional Supervisor / Date

Disapproved / Modified by: \_\_\_\_\_  
Name / Date

Reason for Modification: